UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,075	03/12/2004	Kazuoki Matsugatani	4041J-000850	8081

27572   7590   09/14/2007
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER
LIU, BEN H

ART UNIT	PAPER NUMBER
2609	

MAIL DATE	DELIVERY MODE
09/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/800,075	MATSUGATANI ET AL.
	Examiner	Art Unit	
	Ben H. Liu	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March, 2004.*

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-12 and 16-19* is/are rejected.

7)☒ Claim(s) *9, 13-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12 March, 2004.*

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Specification

1.   The lengthy specification has not been checked to the extent necessary to determine the

presence of all possible minor errors. Applicant's cooperation is requested in correcting any

errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1, 2, 4, 5, 6, 8, and 10 are rejected under 35 U.S.C. 102(b) as being clearly

anticipated by Kuznicki et al. (U.S. Patent 5,311,516).

For claim 1, Kuznicki et al. disclose an information distribution server comprising a

fragment data generation means for generating fragment data with respect to a certain data

aggregate that is one of a plurality of data aggregates using a coded matrix, wherein the fragment

data is capable of restoring the certain data aggregate based on the coded matrix when the

fragment data is collected to a required count (see abstract and column 14 lines 8-16); code

provision means for providing the fragment data generated by the fragment data generation means with an identification code associated with the certain data aggregate restored by the fragment data (see column 16 lines 9-14); and transmission means for transmitting the fragment data having the identification code provided by the code provision means to a transmission channel (see column 5 lines 32-40 and figure 2).

For claim 2, Kuznicki et al. disclose an information distribution server wherein the transmission means transmits, to the transmission channel at a same frequency, each fragment data that is generated by the fragment data generation means with respect to each of the plurality of data aggregates and is provided with each identification code by the code provision means (see column 12 lines 28-37).

For claim 4, Kuznicki et al. disclose an information distribution server wherein the plurality of data aggregates includes a digest data aggregate including digest information; and a detailed data aggregate including detailed information whose category is equal to that of the digest information (see column 20 line 63 to column 21 line 11).

For claim 5, Kuznicki et al. disclose an information distribution server wherein the plurality of data aggregates includes an emergency data aggregate including emergency information, and wherein the code provision means provides a specified identification code indicative of the emergency information to fragment data generated by the fragment data generation means from the emergency data aggregate (see column 19 lines 49-63).

For claim 6, Kuznicki et al. disclose an information distribution server comprising a fragment data generation means for generating fragment data with respect to a certain data aggregate that is one of a plurality of data aggregates using a coded matrix, wherein the fragment

data is capable of restoring the certain data aggregate based on the coded matrix when the

fragment data is collected to a required count (see abstract and column 14 lines 8-16); code

provision means for providing the fragment data generated by the fragment data generation

means with an identification code associated with the certain data aggregate restored by the

fragment data (see column 16 lines 9-14); and transmission means for transmitting the fragment

data having the identification code provided by the code provision means to a transmission

channel (see column 5 lines 32-40 and figure 2). Kuznicki et al. further disclose a reception

terminal communicating with the information distribution server comprising a reception means

for receiving the fragment data transmitted from the information distribution server; and

restoration means for distinguishing the fragment data received by the reception means based on

the identification code provided t o the fragment data and restoring the certain data aggregate

based on the coded matrix (see column 1 lines 58-67 and column 2 lines 1-12).

For claim 8, Kuznicki et al. disclose a reception terminal communicating with the

information distribution server wherein the plurality of data aggregates includes a digest data

aggregate including digest information and a detailed data aggregate including detailed

information whose category is equal to that of the digest information, and wherein the reception

means receives both fragment data generated from the digest data aggregate and fragment data

generated from the detailed data aggregate (see column 20 line 63 to column 21 line 11).

For claim 10, Kuznicki et al. disclose a reception terminal communicating with the

information distribution server wherein the plurality of data aggregates includes an emergency

data aggregate including emergency information, wherein the code provision means of the

information distribution server provides a specified identification code indicative of the

emergency information to fragment data generated by the fragment data generation means from

the emergency data aggregate (see column 19 lines 49-63), and wherein the reception means

receives by priority the fragment data provided with the specified identification code indicative

of the emergency information from the information distribution server (see column 20 lines 63-

67).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness
        or nonobviousness.

6.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.   Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuznicki

et al. (U.S. Patent 5,311,516) in view of Levinson (U.S. Patent 5,404,505).

For claim 3 and 7, Kuznicki et al. disclose all the subject matter of the claimed invention

with the exception wherein the fragment data generation means rearranges a transmission

sequence of the generated fragment data using a random number table and wherein the

restoration means restores the certain data aggregate based on the coded matrix and the random

number table. Levinson from the same or similar fields of endeavor disclose an information

broadcasting system that transmits packets of requested data that are scheduled for transmission

in a pseudo-random sequence and interleaved with other data packets (see column 8 lines 1-5).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the

invention to use the pseudo-random transmission sequence method as taught by Levinson with

the information distribution server and reception terminal as taught by Kuznicki et al. The

pseudo-random transmission sequence method can be implemented by utilizing the data

formatting and transmission subsystem as taught by Levinson with the information distribution

server and reception terminal as taught by Kuznicki et al. The motivation for using the pseudo-

random transmission sequence method as taught by Levinson with the information distribution

server and reception terminal as taught by Kuznicki et al. is to increase the security of the

transmission against unauthorized receivers by making collection of relevant data difficult

without prior knowledge of the transmission sequence.

8.   Claims 11 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kuznicki et al. (U.S. Patent 5,311,516) in view of Kawamata et al. (U.S. Patent 7,024,156).

For claims 11 and 16-19, Kuznicki et al. disclose an information distribution system:

wherein the information distribution server comprises:

first fragment data generation means for generating fragment data with respect to the data

aggregate specified by the certain information received by the first reception means by using the

coded matrix specified by the certain information received by the first reception means, wherein

the fragment data is capable of restoring the data aggregate based on the coded matrix when the

fragment data is collected to a required count (see abstract and column 14 8-16);

first code provision means for providing the fragment data generated by the first fragment

data generation means with the identification code specified by the certain information received

by the first reception means (see column 16 lines 9-14); and

first transmission means for transmitting the fragment data having the identification code

provided by the first code provision means to the reception terminal (see column 5 lines 32-40

and figure 2),

wherein the reception terminal comprises:

fourth reception means for receiving the given information identifying the identification

code and the coded matrix transmitted from the reservation terminal, and for receiving the

fragment data having the identification code transmitted from the information distribution server

based on the identification code specified by the given information received from the reservation

terminal; and fourth restoration means for restoring the data aggregate from the fragment data

having the identification code received by the fourth reception means based on the coded matrix

specified by the given information received by the fourth reception means (see column 1 lines

58-67 and column 2 lines 1-12).

For claims 11 and 16-19, Kuznicki et al. disclose an information distribution system with

the following exceptions:

wherein the information distribution server comprises a first reception means for

receiving certain information specifying a data aggregate, an identification code, and a coded

matrix from the reservation server as recited in claims 11 and 16;

wherein the reservation server comprises a second reception means for receiving a

request to transmit the data aggregate from the reservation terminal; and a second transmission

means for transmitting the certain information specifying the data aggregate, the identification

code, and the coded matrix to the information distribution server based on reception of the

second reception means, and for transmitting given information specifying the identification

code and the coded matrix to the reservation terminal based on reception of the second reception

means as recited in claims 11 and 17;

wherein the reservation terminal comprises a third transmission means for transmitting

the request to transmit the data aggregate to the reservation server; a third reception means for

receiving the given information specifying the identification code and the coded matrix from the

reservation server; and a third additional transmission means for transmitting the given

information specifying the identification code and the coded matrix received by the third

reception means to the reception terminal as recited in claims 11 and 18.

Kawamata et al. from the same or similar fields of endeavor disclose an information

distribution system comprising an information distribution apparatus that receives and responds

to a request for data and a reception terminal that transmits requests for data and receives the

requested data (see column 3 lines 41-51). Thus, it would have been obvious to the person of

ordinary skill in the art at the time of the invention to use the information distribution apparatus

and reception terminal as taught by Kawamata et al. with the information distribution system as

taught by Kuznicki et al. The information distribution apparatus and reception terminal as taught

by Kawamata et al. can be implemented by configuring the information distribution server and

reception terminal in the information distribution system as taught by Kuznicki et al. to

communicate and process data requests. The motivation for using the information distribution

apparatus and reception terminal as taught by Kawamata et al. with the information distribution

system as taught by Kuznicki et al. is to allow the transmission of large quantities of data with a

low cost by only transmitting data that is requested by the client.

9.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuznicki et al.

(U.S. Patent 5,311,516) in view of Kawamata et al. (U.S. Patent 7,024,156) as applied in claim

11 above, and in further view of Levinson (U.S. Patent 5,404,505).

For claim 12, Kuznicki et al. and Kawamata et al. disclose all the subject matter of the

claimed invention with the exception wherein the fragment data generation means rearranges a

transmission sequence of the generated fragment data using a random number table and wherein

the restoration means restores the certain data aggregate based on the coded matrix and the

random number table. Levinson from the same or similar fields of endeavor disclose an

information broadcasting system which transmits packets of requested data are scheduled for transmission in a pseudo-random sequence, interleaved with other data packets (see column 8 lines 1-5). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the pseudo-random transmission sequence method as taught by Levinson with the information distribution server and reception terminal as taught by Kuznicki et al. and Kawamata et al. The pseudo-random transmission sequence method can be implemented by utilizing the data formatting and transmission subsystem as taught by Levinson with the information distribution server and reception terminal as taught by Kuznicki et al. and Kawamata et al. The motivation for using the pseudo-random transmission sequence method as taught by Levinson with the information distribution server and reception terminal as taught by Kuznicki et al. and Kawamata et al. is to increase the security of the transmission against unauthorized receivers by making collection of relevant data difficult without prior knowledge of the transmission sequence.

Allowable Subject Matter

10.   Claims 9, 13, 14, and 15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
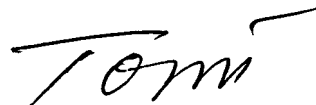
Conclusion

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben H. Liu whose telephone number is (571) 270-3118. The examiner can normally be reached on Monday Through Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BL

DANG T. TON
SUPERVISORY PATENT EXAMINER